Datasheet for ABIN7169307

# anti-PPP1CA antibody (Catalytic Subunit) (HRP)

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## Overview

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| Quantity: | 100 µg |
| Target: | PPP1CA |
| Binding Specificity: | AA 192-330, Catalytic Subunit |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This PPP1CA antibody is conjugated to HRP |
| Application: | ELISA |

## Product Details

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| Immunogen: | Recombinant Human Serine/threonine-protein phosphatase PP1-alpha catalytic subunit protein (192-330AA) |
| Isotype: | IgG |
| Cross-Reactivity: | Human |
| Purification: | >95%, Protein G purified |

## Target Details

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| Target: | PPP1CA |
| Alternative Name: | PPP1CA (PPP1CA Products) |
| Background: | Background: Protein phosphatase that associates with over 200 regulatory proteins to form |

## Target Details

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| | highly specific holoenzymes which dephosphorylate hundreds of biological targets. Protein phosphatase 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. May play an important role in dephosphorylating substrates such as the postsynaptic density-associated Ca(2+)/calmodulin dependent protein kinase II. Component of the PTW/PP1 phosphatase complex, which plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase. Regulates NEK2 function in terms of kinase activity and centrosome number and splitting, both in the presence and absence of radiation-induced DNA damage. Regulator of neural tube and optic fissure closure, and enteric neural crest cell (ENCCs) migration during development. In balance with CSNK1D and CSNK1E, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. May dephosphorylate CSNK1D and CSNK1E. Dephosphorylates the \'Ser-418\' residue of FOXP3 in regulatory T-cells (Treg) from patients with rheumatoid arthritis, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed:23396208). Aliases: Alpha isoform serine threonine protein phosphatase PP1alpha 1 catalytic subunit antibody, Catalytic subunit antibody, EC 3.1.3.16 antibody, MGC15877 antibody, MGC1674 antibody, PP 1A antibody, PP-1A antibody, PP1A antibody, PP1A_HUMAN antibody, PP1alpha antibody, PP2C ALPHA antibody, PP2CA antibody, Ppp1ca antibody, Protein Phosphatase 2C Alpha Isoform antibody, Serine threonine protein phosphatase PP1 alpha catalytic subunit antibody, Serine threonine protein phosphatase PP1 alpha catalytic subunit protein phosphatase 1 antibody, Serine/threonine-protein phosphatase PP1-alpha catalytic subunit antibody |
| UniProt: | P62136 |
| Pathways: | M Phase, Cellular Glucan Metabolic Process, Regulation of Carbohydrate Metabolic Process, Lipid Metabolism |

## Application Details

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| Application Notes: | Optimal working dilution should be determined by the investigator. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |

## Handling

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| Buffer: | Preservative: 0.03 % Proclin 300<br>Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4 |
| Preservative: | ProClin |
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | -20 °C,-80 °C |
| Storage Comment: | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |